

## **REMARKS**

Claims 1-17 are pending in the application. It is gratefully acknowledged that Claim 17 has been allowed. It is also gratefully acknowledged that Claims 3-5, 8-10 and 12-16 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. The Examiner has rejected Claims 6 and 7 under 35 U.S.C. §102(e) as being anticipated by Abe (U.S. Patent 6,154,454). The Examiner has rejected Claims 1 and 2 under 35 U.S.C. §103(a) as being unpatentable over Umeda et al. (U.S. Patent 5,581,547) in view of Dent (U.S. Patent 5,430,760). The Examiner has rejected Claim 11 under 35 U.S.C. §103(a) as being unpatentable over Halton et al. (U.S. Patent 6,621,803) in view of Ahmadvand (U.S. Patent 6,477,670).

Please amend Equation 4 and the first full paragraph on page 23 as set forth above. No new matter has been added.

Please amend Claim 17 as shown above. No new matter has been added.

### **Claim Rejections under 35 U.S.C. § 102(e)**

Regarding the rejections of Claims 6 and 7 under §102(e), the Examiner states that Abe discloses all of the elements of the claims. Abe discloses a radio communication device and mobile communication system. The Examiner states that receiving RACH system information and selecting a scrambling code based on the total number of the RACHs and a unique identifier is disclosed by Abe at col. 6, lines 46-62. Claim 6 of the present application recites a method for selecting scrambling codes for random access channels (RACHs) from a set of scrambling codes available in a mobile communication system. Claim 6 recites that a user equipment (UE) receives a plurality of scrambling codes available for a RACH from a base station and selects one scrambling code out of the plurality of available codes using an identifier unique to that UE.

Abe discloses that control channel information is analyzed and processed, that a

frequency band, a spreading code (code channel) and a time slot to be used on an access channel depending on the control channel information are recognized, and the frequency band or the spreading code are fed to an access channel transmitter, and the time slot is fed to command section. Abe suggests using an identification number to recognize values representing the frequency band, the code channel and the time slot. These values are used on the access channel. The header pattern of Abe is obtained by using the identification number. Abe discloses recognizing a header pattern, a frequency band, a spreading code and a time slot using an identification number. Also, Abe discloses that the spreading code is detected using the identification number.

However, the spreading code of Abe is only a spreading code corresponding to an access channel from a base station, which is not a scrambling code used for the RACHs. Claim 6 of the present application recites selecting a scrambling code for the RACHs using an identifier while Abe merely discloses recognizing an access channel used in a base station. Abe also fails to disclose a structure for transmitting scrambling codes to be used for RACHs of the base station to a UE.

Based on at least the foregoing distinctions, withdrawal of the rejection of Claim 6 is respectfully requested.

#### **Claim Rejections under 35 U.S.C. § 103(a)**

##### **Claims 1 and 2:**

Regarding the rejections of Claims 1 and 2 under §103(a), the Examiner states that Umeda et al. in view of Dent discloses all of the elements of Claims 1 and 2. Umeda et al. discloses a random access communication method by CDMA and mobile station equipment using the same; Dent discloses random access in mobile radio telephone systems. The Examiner states that transmitting the RACH information and selecting a scrambling code as recited in

Claim 1 is disclosed by Umeda et al. at col. 9 and Dent at col. 9. Claim 1 recites a method for selecting a scrambling code using a unique identifier by a UE which receives information relative to a plurality of scrambling codes having a serial number corresponding to each RACH. The method of Claim 1 receives from a base station information relative to a plurality of scrambling codes and selects one of the scrambling codes from the plurality of scrambling codes using a unique identifier.

Umeda discloses selecting a spreading code number using setting signals (CS) provided by an information controller. Also, FIG. 12 of Umeda illustrates designating spreading codes in response to a serial number, by generating an arbitrary number based on the CS provided and by using a look-up table. Umeda fails to disclose receiving information related to a plurality of scrambling codes from a base station. The Examiner cites Dent as disclosing this element.

Dent discloses a mobile station that transmits a random access message using a selected scrambling code out of available scrambling codes, and transmitting information related to the available scrambling codes as a broadcasting message. Claim 1 of the present application recites transmitting by a base station information related to a plurality of scrambling codes having a serial number associated with the RACH, whereas Dent discloses that the actual available scrambling codes are transmitted.

In addition, Dent divides each mobile station through a timing delay while a plurality of mobile stations use one spreading code, one frequency and one spreading code are used for all of the mobile stations, and a mobile station ID is used to select one control channel out of a plurality of control channels.

Claims 1 and 2 of the present application are distinguishable from Umeda and Dent in that Claims 1 and 2 use scrambling codes. Also, in Claims 1 and 2, if a UTRAN transmits the scrambling codes to a UE through the RACHs, the UE selects a scrambling code for the UE from the plurality of scrambling codes using the ID of the UE.

Based on at least the foregoing distinctions, withdrawal of the rejections of Claims 1 and 2 is respectfully requested.

**Claim 11:**

Regarding the rejections of Claim 11 under §103(a), the Examiner states that Halton et al. in view of Ahmadvand discloses all of the elements of Claim 11. Halton et al. discloses a random access channel prioritization scheme; Ahmadvand discloses a data link layer quality of service for UMTS. The Examiner states that determining an access service class, receiving mapping information message, mapping the analyzed scrambling codes, selecting a scrambling code group, and selecting one of the scrambling codes as recited in Claim 11 is disclosed by Halton et al. in Figures 2-4 and Dent at col. 6.

Claim 11 recites a method for selecting a RACH where a different scrambling code group for a PRACH is designated for each UE, and a scrambling code used for the PRACH is selected using the PRACH scrambling codes contained in a PRACH scrambling code group to which a UE belongs from among all of the PRACH scrambling code groups. Claim 11 discloses that a scrambling code group for the PRACH is divided according to the ASC for each UE within the same cell during the selection of the scrambling code used for the PRACH. To accomplish this, the base station of the Claim 11 transmits PRACH system information through a broadcasting channel together with the ASC and mapping information from among the scrambling code groups. The UE can then select the scrambling code for the PRACH from the scrambling code groups corresponding to the received ASC.

Halton discloses designating a random access time window having a plurality of random access slots and divides the random access time window into at least two groups, and discloses allocating transmission priority classes representing the transmission priorities of the random access data for transmitting the divided each group to a random access slot.

The “group” recited in Claim 11 of the present application is distinguishable from Halton

in that Claim 11 discloses access service groupings for designating scrambling code groups that are designated in response to a specific UE from the scrambling codes allocated by a base station.

Also, in the present application, the total number of scrambling codes and the unique identifier of the UE are used in selecting one of the scrambling codes mapped into the selected scrambling code group, while Halton uses a valid slot number and executes a selection in accordance with an access trial pattern.

Based on at least the foregoing distinctions, withdrawal of the rejection of Claim 11 is respectfully requested.

Independent Claims 1, 6 and 11 are believed to be in condition for allowance. Without conceding the patentability per se of dependent Claims 2 and 7, these are likewise believed to be allowable by virtue of their dependence on their respective amended independent claims. Accordingly, reconsideration and withdrawal of the rejections of dependent Claims 2 and 7 is respectfully requested.

Accordingly, all of the claims pending in the Application, namely, Claims 1-17, are believed to be in condition for allowance. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicant's attorney at the number given below.

Respectfully submitted,



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